

3.7 WETLANDS

3.7.1 Existing Environment

Wetlands are areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of wetland vegetation typically adapted for life in saturated soil conditions (COE 1987). Iroquois used the 1987 COE Wetlands Delineation Manual to identify and delineate wetlands in New York and Connecticut that would be affected by the ELI Project. Table 3.7.1-1 lists each wetland that would be crossed by the proposed project by milepost, wetland type, length of crossing, and area affected by construction and operation. Iroquois has stated that access permission was requested for all portions of the project on land, and that permission was granted for all of the proposed aboveground facilities and approximately 10.6 miles (88 percent) of the onshore pipeline facility. Iroquois has also stated that they would provide us the results of wetland surveys in areas with current access restrictions once access has been granted and surveys are completed.

Based on the COE wetland delineation and an evaluation of National Wetland Inventory (NWI) maps, aerial photography, and NYSDEC-regulated freshwater wetland maps, the pipeline facility would cross a total of one wetland for a total crossing length of 0.1 miles (see table 3.7.1-1). No wetlands would be affected by the proposed aboveground facilities in Connecticut or New York.

One tidal wetland listed on New York's Tidal Wetland Inventory (TWI) would be crossed by the project between MPs 16.9 and 17.1. This wetland is a littoral zone wetland and is crossed in waters adjacent to Long Island that are less than 6 feet deep. Littoral zone wetlands include all lands under tidal waters that are not included in any other category. Although crossing this wetland will require a Tidal Wetland permit from the NYSDEC pursuant to Article 25 of the New York State Environmental Conservation Law, it does not contain vegetation and is therefore considered open water in this section and section 3.8.

3.7.2 Environmental Consequences

Table 3.7.1-1 summarizes the acreage of estuarine and freshwater (palustrine) wetlands located in the construction ROW and the permanent ROW. The ELI pipeline would not involve any loss of wetlands. Iroquois would construct the pipeline across wetlands in accordance with our Plan and Procedures, which specifies the installation of erosion control barriers, use of equipment mats, dewatering procedures, and wetland restoration requirements, such as seeding and mulching.

Several commentors requested that Iroquois evaluate the impacts that the ELI Project would have on wetlands. The one non-tidal wetland crossed by the proposed pipeline would be avoided by using the HDD construction method to install the pipeline beneath the entire wetland and a 100-foot buffer zone on either side, with no ground surface disturbance. Therefore, no short-term or long-term impacts on wetlands are anticipated as a result of construction and maintenance of the ELI Project.

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**TABLE 3.7.1-1
Wetland Crossings**

Milepost	Wetland ID	Wetland Type	Crossing Length (ft)	Acreage Affected by Construction (acres)	Acreage Affected by Operation (acres)
16.9	E2BBP	Littoral Zone	1056	7.3 ^{a/}	0.73 ^{a/}
27.5	LIE-1	PFO/PSS/PEM ^{b/}	528	0 ^{c/}	0 ^{c/}
Total:			1584	7.3	0.73

^{a/} Impacts to tidal wetlands have also been included in impact calculations for navigable waters of the Long Island Sound.

^{b/} Classification of Wetlands and Deepwater Habitats (Cowardin et al., 1979)

PEM = Palustrine Emergent

PSS = Palustrine Scrub/Shrub

PFO = Palustrine Forested

^{c/} All wetland impacts at MP 27.5 would be avoided by the use of the HDD construction method.

3.8 LAND USE, RECREATION, AND VISUAL RESOURCES

3.8.1 Land Use

3.8.1.1 Existing Environment

The ELI Extension Project would involve construction of 29.1 miles of pipeline in the states of Connecticut and New York, including aboveground facilities in support of this pipeline, and modifications to three compressor stations. Of the 29.1 miles of pipeline, 17.1 miles would be on the sea floor of Long Island Sound, including 7.5 miles in Connecticut State waters and 9.6 miles in New York State waters. The remaining 12.0 miles of pipeline would be onshore, across Long Island, New York. Aboveground facilities would include one marine tap interconnect in the offshore portion of the project in waters owned by the State of Connecticut; three mainline valves onshore in New York State; one receiver facility in New York State; one meter station in New York State; modifications to the Dover Compressor Station in Dover, Dutchess County, New York (approved in Docket No. CP00-232-000); construction of the Devon compressor station at an existing mainline valve site in Milford, Fairfield County, Connecticut; and reconfiguration to the Brookfield Compressor Station in Brookfield, Fairfield County, Connecticut (proposed in Docket No. CP02-31-000).

For the offshore portion of the proposed project, Iroquois has indicated that marine pipeline material would be delivered by barge from the concrete coating plant and offloaded directly to the lay barge. Therefore, an onshore storage yard and support base would not be necessary. Iroquois would notify FERC and conduct the appropriate clearances if it is determined that an onshore storage yard and/or support base is needed. For the onshore portions of the proposed project, Iroquois would use existing roads along the route for construction access to the maximum extent possible. Iroquois has indicated that a total of five access roads have been requested for the proposed project, including two roads for temporary use during construction, and three roads for use as permanent access to the pipeline and meter station. In addition, Iroquois would temporarily use one area for a contractor warehouse/staging yard. Specifically, Iroquois would temporarily use approximately 13.8 acres of disturbed open land located approximately 110 feet west of the proposed pipeline at MP 26.6 for this yard.

The principal land use category that would be crossed by the pipeline is open water (58.8 percent of the proposed project) associated with the Sound crossing. Of the remaining 12.0 miles of pipeline on land, the predominant land use is open space (23.7 percent of the proposed project), forest (15.1 percent of the proposed project), agricultural land (2.4 percent of the proposed project), and beach (less than 0.1 percent of the proposed project). Approximately 90 percent of the 12.0 miles of pipeline on land would be constructed adjacent to or overlapping with existing ROW associated with roads and highways. Table 3.8.1-1 summarizes the land uses and open water crossed by the proposed pipeline.

TABLE 3.8.1-1

Land Uses Crossed by the Proposed Pipeline (in miles)

Facility/State	Open Water ^{a/}		Forested ^{b/}		Open ^{c/}		Agricultural ^{d/}		Beach ^{e/}		Com/Ind ^{f/}		Total	
	(mi)	(%)	(mi)	(%)	(mi)	(%)	(mi)	(%)	(mi)	(%)	(mi)	(%)	(mi)	(%)
EASTERN LONG ISLAND EXTENSION FACILITIES														
Eastern Long Island Extension Pipeline														
Connecticut	7.5	25.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	25.8
New York	9.6	33.0	4.4	15.	6.9	23.7	0.7	2.4	<0.	<0.1	0.0	0.0	21.6	74.2
TOTAL	17.1	58.8	4.4	15.1	6.9	23.7	0.7	2.4	<0.1	<0.	0.0	0.0	29.1	100.0

^{a/} Open Water – surface water crossings greater than 100 feet.

^{b/} Forested – non-agricultural wooded uplands and forested wetlands.

^{c/} Open – non-agricultural open and scrub-shrub fields and emergent wetlands. Also includes existing road crossings greater than 50 feet wide and highway ROW.

^{d/} Agricultural – actively cultivated uplands, farmed wetlands, hay fields, tree farms, orchards, and nurseries. Also includes fence lines, windbreaks, and shelter belts within agricultural areas.

^{e/} Beach – open sand from the water level landward to vegetation line; considered an Estuarine, Intertidal, Beach/Bar wetland type (E2BBP) as described on National Wetland Inventory Mapping (FWS 1990, Wading River Quad map).

^{f/} Com/Ind - existing commercial and industrial developments including retail stores, office buildings, manufacturing plants, utility stations, rock quarries, and shipping terminals.

Note: Land uses were assigned based on the predominant use across the proposed ROW. Some calculation differences may occur due to rounding.

The marine tap interconnect would occupy open water in the State of Connecticut. The three mainline valves would be constructed within the permanent ROW of the proposed pipeline. The meter station and the receiver station would be constructed within upland forest area. Modifications to the existing Dover Compressor Station would require 6.2 acres of open land for construction purposes, and 1.9 acres for operation purposes. Following modifications to the existing Dover Compressor Station, an additional 0.5 acres would be included in the fenced area of the compressor station. Construction of the Devon Compressor Station would require 8.3 acres of commercial/industrial land; operation of this compressor station would require 3.9 acres. Following construction of the Devon Compressor Station, an area of 3.9 acres would be fenced. Modifications to the Brookfield Compressor Station would require 3.8 acres of open land for construction purposes and 0.5 acres for operation purposes. Following modifications to the existing Brookfield Compressor Station, an additional 0.08 acres would be included in the fenced area of the compressor station. Table 3.8.1-2 identifies land uses affected by the aboveground facilities.

The open water category of land use consists of the 17.1-mile Long Island Sound crossing. The forest land category consists mainly of non-agricultural wooded uplands dominated by oak/pitch pine and scrub oak communities, and forested wetlands dominated by red maple. The open land category consists of non-agricultural open land and overgrown scrub-shrub fields, including pastures, fallow cropland and cleared areas, existing access roads, railroad crossings, road crossings greater than 50 feet wide, and highway ROW. No lands managed under the USDA, Farm Service Agency Conservation Reserve Program (CRP) would be crossed by the project.

TABLE 3.8.1-2
Land Uses at Aboveground Facilities ^{a/}

Facility	MP	County, State	Land Use	Acres to be Affected	
				Construction	Operation
Marine Tap Interconnection (MLV-1)	0.0	New Haven, CT	Open Water	1.4	0.1
MLV-2	17.5	Suffolk, NY	Upland Forest	NA	NA
MLV-3	22.7	Suffolk, NY	Open Space	NA	NA
MLV-4	29.1	Suffolk, NY	Upland Forest	NA	NA
Receiver Facility	29.1	Suffolk, NY	Upland Forest	0.2	0.2
Meter Station	29.1	Suffolk, NY	Upland Forest	3.9	0.2
Dover Compressor Station	NA	Dutchess, NY	Open Space	6.2	1.9
Devon Compressor Station	NA	New Haven, CT	Com./Ind. ^{b/}	8.3	3.9
Brookfield Compressor Station	NA	Fairfield, CT	Open Space	3.8	0.5
TOTAL				23.8	6.8
			Upland Forest	4.1	0.4
			Open Space	10.0	2.4
			Commercial/Industrial	8.3	3.9
			Open Water	1.4	0.1

^{a/} Land use requirements for mainline valves are not included in this table because they would be located within compressor or meter station properties or the permanent ROW.
^{b/} Com./Ind. = Commercial/Industrial.

The agricultural land category consists of actively cultivated croplands, hay fields, tree farms, orchards, and nurseries. The USDA, NRCS, Suffolk County Soil and Water Conservation District has indicated that the proposed pipeline portion of the project may also traverse areas of prime farmland. Iroquois has indicated that the project area for proposed modifications at the Dover Compressor Station contains 3.3 acres of prime farmland. No impacts are anticipated for the prime farmland at the Dover Compressor Station because this portion of the compressor station would be used for temporary staging areas, with minimal ground disturbance.

The beach land category consists of open sand from the water level landward to the vegetation line, including sand dunes. Beach land crossed by the proposed project includes an Estuarine, Intertidal, Beach/Bar wetland type (E2BBP). Beach land traversed by the proposed project falls under the New York State Coastal Zone Management Program. Iroquois would meet all stipulations of Coastal Zone Consistency for the State of New York, and would attain all appropriate Coastal Zone Consistency permits and concurrence prior to construction.

The commercial/industrial land category consists of existing or planned commercial and industrial developments, such as retail stores, office buildings, manufacturing plants, utility stations, rock quarries, and shipping terminals. See section 3.8.2 for more details regarding commercial/industrial areas crossed by the proposed project.

The residential land category consists of existing and planned rural, suburban, and urban residential developments. A total of seven residences were identified along the project. See section 3.8.2 for more details regarding residential areas crossed by the project.

3.8.1.2 Environmental Consequences

Temporary and permanent land use impacts would generally result from the clearing of land for installation of the pipeline and aboveground facilities, and the operation and maintenance of the

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pipeline ROW and aboveground facilities. Table 3.8.1-3 presents the land use acreage for impacts associated with construction and operation of the pipeline and aboveground facilities.

Construction of the ELI pipeline and aboveground facilities, and modifications to the Dover Compressor Station would disturb about 388.9 acres, including 365.1 acres for workspace associated with pipeline construction, and 23.8 acres for construction of aboveground facilities, including the meter station, and the Dover, Devon, and Brookfield compressor stations. See Table 3.8.1-3 for a detailed breakdown of these totals by project component.

TABLE 3.8.1-3

Acres Affected by Construction and Operation

	Open Water ^{a/}		Forested ^{b/}		Open ^{c/}		Agricultural ^{d/}		Beach ^{e/}		Com/Ind ^{f/}		Total	
	Con. ^{g/}	Op. ^{h/}	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.
EASTERN LONG ISLAND EXTENSION FACILITIES														
Connecticut														
Pipeline ^{i/}	87.0	25.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	87.0	25.8
Aboveground Facilities	1.4	0.14	0.0	0.0	3.8	0.5	0.0	0.0	0.0	0.0	8.3	3.9	13.5	4.54
Subtotal	88.4	25.94	0.0	0.0	3.8	0.5	0.0	0.0	0.0	0.0	8.3	3.9	100.5	30.34
New York														
Pipeline ^{i/}	141.6	36.4	47.8	26.7	77.8	41.3	7.7	4.3	3.2	0.4	0.0	0.0	278.1	109.1
Aboveground Facilities	0.0	0.0	4.1	0.4	6.7	1.9	0.0	0.0	0.0	0.0	0.0	0.0	10.3	2.3
Subtotal	141.6	36.4	51.9	27.1	84.0	43.2	7.7	4.3	3.2	0.4	0.0	0.0	288.4	111.4
GRAND TOTAL														
Pipeline ^{i/}	228.6	62.2	47.8	26.7	77.8	41.3	7.7	4.3	3.2	0.4	0.0	0.0	365.1	134.9
Aboveground Facilities	1.4	0.14	4.1	0.4	10.0	2.4	0.0	0.0	0.0	0.0	8.3	3.9	23.8	6.84
Total	230.0	62.34	51.9	27.1	87.8	43.7	7.7	4.3	3.2	0.4	8.3	3.9	388.9	141.74

a/ Open Water – surface water crossings greater than 100 feet. Acreages do not include the estimated 2,710 acres potentially affected by anchor scars and cable sweep.

b/ Forested – non-agricultural wooded uplands and forested wetlands.

c/ Open – non-agricultural open and scrub-shrub fields and emergent wetlands (including existing ROW).

d/ Agricultural – actively cultivated uplands, farmed wetlands, hay fields, tree farms, orchards, and nurseries.

e/ Beach – open sand from the water level landward to vegetation line; considered an Estuarine, Intertidal, Beach/Bar wetland type (E2BBP) as described on National Wetland Inventory Mapping (FWS 1990, Wading River Quad Map).

f/ Com/Ind - existing commercial and industrial developments including retail stores, office buildings, manufacturing plants, utility rock quarries, and shipping terminals.

g/ Con. = Construction.

h/ Op. = Operation.

i/ Construction work area includes construction ROW and additional temporary workspace areas. Operation work area is the permanent ROW, which was assumed to be generally 50 feet wide, except in open water of Long Island Sound, where a 30-foot permanent ROW would occur. Some on-shore areas would have less than a 50-foot-wide permanent right-of-way so actual operational area may be less than shown.

ROW Easements

An easement would be used to convey both temporary (for construction) and permanent ROW to Iroquois. The easement would give Iroquois the right to construct, operate, and maintain the pipeline, and establish a permanent ROW. In return, Iroquois would compensate the landowner for the use of the land. The easement negotiations between Iroquois and the landowner would typically specify compensation for loss of use during construction, loss of non-renewable or other resources, and allowable uses of the ROW after construction.

If an easement cannot be negotiated with the landowner and the project has been certificated by the Commission, Iroquois may use the right of eminent domain granted to it under section 7(h) of the NGA and the procedure set forth under the Federal Rules of Civil Procedure (Rule 71A) to obtain the ROW and extra workspace areas. Iroquois would still be required to compensate the

landowner for the ROW, and for any damages incurred during construction. However, the level of compensation would be determined by a court according to state law once Iroquois is issued a certificate. In either case, Iroquois would compensate landowners for the use of the land. Permits and approvals would be obtained, as needed, for pipeline crossings of roads, railroads, and waterbodies.

Open Water Impacts and Mitigation Measures

The proposed project would traverse approximately 17.1 miles of open water across the Long Island Sound. Approximately 2,930 acres of sea bottom would be impacted by construction of the proposed project. Operation of the proposed project in the Sound would affect 62.2 acres associated with the proposed pipeline, and 0.14 acres associated with the marine tap interconnect at MP 0.0.

Construction within the open waters of the Sound would result in short-term impacts on water-related uses. Impacts would be limited to the duration of construction and include potential disruption of commercial fishing activities and vessel traffic within the vicinity of the offshore construction spread. Iroquois proposes to reduce these impacts primarily by constructing the pipeline during the winter months when commercial and recreational fishing, recreational boating, and boat tour traffic is reduced. In addition, Iroquois expects pipe laying to proceed rapidly through the Sound, at about 3,500 to 4,000 feet per day. Burying the pipe to the maximum depth possible would minimize the risk associated with items such as fishing gear catching on underwater obstructions like the proposed pipeline. During operation, no impacts on fishing operations, ship movement, or boating are expected.

Commercial Fishing

Commercial fishing, including shellfishing and lobstering, is an important industry in this region. Impacts to commercial fishing activities may occur because fishing areas may be temporarily unavailable to commercial fishing operations during construction or because fish are temporarily displaced from the construction area. These effects are expected to be short-term, as fishing areas would become available and fish are expected to return once construction activities have ceased. To mitigate these impacts, Iroquois proposes to consult with local fisherman with regard to construction scheduling and activities, and provide public advertising that would allow local and commercial fishermen to remove any fixed fishing gear from the construction area before construction activities begin. Operation of the offshore pipeline is not expected to have any impacts on commercial fishing. It is possible that fishing gear could catch on underwater obstructions, but this potential impact is expected to be reduced and mitigated by installing the pipeline below the bottom of the Sound.

Shellfishing is a significant commercial fishing industry in the Sound. The proposed pipeline segment in the Sound would cross one shellfish lease area, located in Connecticut State waters. This shellfish lease area (Block Lease L-580, between MP 0.0 and 0.2, leased by Fairhaven Clam and Lobster Co., LLC) would be directly impacted for 936 linear feet by installation of the pipeline below the bottom of the Sound. Iroquois identified 24 additional shellfish lease areas that would not be traversed by the pipeline, but are located within 1.0 mile of the centerline of the pipeline route. Potential impacts of pipeline construction on shellfish areas are described in section 3.4.1.2. Generally, these impacts are expected to be minimal and short-term as construction would move rapidly through these areas.

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- Notify all parties of interest of the exact location of the proposed pipeline alignment and construction corridor prior to construction;

Coordinate and communicate with all interested parties on the timing and scheduling of construction activities;

Evaluate potential construction methods to help avoid and minimize disruption to shellfish harvesting and reproduction; and,

Conduct sediment deposition studies to define potential areas of impact, if requested by regulators.

Lobstering is another significant commercial fishing industry in the Sound. In order to minimize potential impacts to the lobster industry, Iroquois proposes the following measures to mitigate impacts to the lobster industry:

- Construct the pipeline during winter months;
- Notify the Lobsterman's Associations of the exact location of the proposed pipeline alignment and construction corridor prior to construction;
- Advise the Lobsterman's Associations of the size of the lay barge and support vessels within the construction spread;
- Advise the Lobsterman's Associations of the construction schedules and to update scheduling changes to facilitate the removal of lobster pots within the ROW prior to construction; and,
- Investigate whether a lobsterman should act as a spotter on the lay barge during construction to identify and remove fishing gear within the construction work area.

Iroquois has initiated consultation with pertinent commercial fishing resource management and regulatory agencies to identify specific measures to avoid or minimize impacts on commercial fishing, including the State of Connecticut Department of Agriculture, Division of Aquaculture, the Connecticut and Long Island Lobstermen's Associations, and individual operators and leaseholders of shellfish areas. Results of these consultations are as follows.

Iroquois informed the State of Connecticut Department of Agriculture, Division of Aquaculture of the proposed project during a public meeting held on February 14, 2002. The Division of Aquaculture indicated at that time that they would like the location of the sub-sea tap for the proposed project to be moved completely off the Shellfish Block Lease L-580. Iroquois has examined alternatives to traversing this shellfish lease area, including moving the project starting point between 0.25 and 2.0 miles south and west of the currently proposed starting point. However,

these alternative locations contain very organic silts, which create a number of potential problems that are contrary to Iroquois' criteria for selecting the current proposed project starting point, including: soils with a lack of shear strength, resulting in a poor foundation material for the proposed project; decreased visibility, which is a major concern to diving operations, safety and overall constructibility; increased potential for turbidity from dredging; and an operationally inferior hydraulic design for the proposed project. Because the proposed project starting point at MP 0.0 is in an area that has sustained prior disturbance due to construction of the existing Iroquois pipeline, and has subsequently been classified as a shellfish resource area after construction of the same existing Iroquois pipeline, Iroquois proposes to retain its current proposed starting point.

The CTDEP specifically requested that Iroquois consult with the Department of Agriculture's Division of Aquaculture to identify potential impacts on shellfish habitat and shellfishing. As discussed above, Iroquois has already conducted such consultation, and we believe that Iroquois has adequately evaluated the Connecticut Department of Agriculture, Division of Aquaculture's request to move the sub-sea tap to avoid impacts to shellfish beds.

Iroquois has held discussions with representatives of both the Connecticut and the Long Island Lobstermen's Associations regarding the proposed project. Both groups appreciated notification of the proposed project prior to initiation of project survey methods. The Connecticut Lobstermen's Association indicated they would like advance notice to move their lobster pots prior to construction to avoid damage, and were satisfied with Iroquois' proposed method of notification. The Long Island Lobstermen's Association indicated that advance notice of the proposed survey schedule and construction project would be sufficient for them to inform those lobstermen who fish in the area of the proposed project.

Similar to ROW easements that were discussed earlier, with respect to compensation for damages to these association's members for loss of income due to the Project's impacts during construction, the amount would be determined in a court according to their respective state's laws, if a mutually acceptable agreement cannot be reached by the affected parties.

Iroquois has initiated consultation with individual operator's and leaseholders of shellfish areas. Iroquois is in the process of developing a final agreement with the leaseholder of Shellfish Block Lease L-580 for traversing this area. Joseph Conti, Operations Manager of Mariculture Unlimited, raised a concern that the proposed ELI Project crossing of the Sound is in close proximity to shellfish bed L-508, and construction activities could result in damage to this nearby shellfish ground. He requested that Iroquois consider moving the proposed project alignment in this area further to the west to avoid potential impacts to the above shellfish bed. Joseph Gilbert, of Briarpatch Enterprises, Inc., also raised a concern that the proposed ELI Project crossing of the Sound crosses one shellfish bed and is in close proximity to another leased area. He also requested that Iroquois consider moving the proposed project alignment further to the west to avoid any direct impacts on any shellfish lots; specifically that the proposed project not be sited on or near any shellfish beds. Iroquois met with representatives of leaseholders for Shellfish Block Leases L-507 and L-508, and to address their concerns. As discussed above, Iroquois considered moving the proposed project alignment between 0.25 and 2.0 miles to the south and west to avoid direct impacts on shellfish areas, but indicated that the proposed project location is preferable because of engineering and safety concerns with constructing the tie-in facility in a suitable substrate and water depth (also see 4.4.1, starting point variation).

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As stated in section 3.4.1.2, we believe that Iroquois' consideration of alignment alternatives, use of the proposed sub-sea plowing method of pipeline installation, and other proposed mitigation measures would avoid or minimize potential impacts on known shellfish beds. However, to specifically address the issue of loss of productivity of shellfish beds potentially impacted by the proposed project, we believe that additional negotiation with individual operators and leaseholders of shellfish beds may be necessary. For example, under Docket No. CP01-384-000, the Islander East Pipeline Company identified preconstruction harvesting of shellfish beds as one method of compensation for potential loss of productivity of shellfish beds as a result of the proposed Islander East project. Therefore, we recommend that:

Iroquois should continue to consult with individual operators and leaseholders of shellfish beds traversed by, or in the vicinity of the proposed project, to identify specific provisions for the reduction or mitigation of the potential loss of productivity of these shellfish beds, including, but not limited to, such options as preconstruction harvesting and/or coordination of clam harvesting activities in conjunction with construction activities. If further consultations result in additional measures to reduce or mitigate the potential loss of productivity of shellfish beds, Iroquois should file these measures, including any related correspondence, with the Secretary prior to construction.

Recreational Fishing

Impacts to recreational fishing activities by proposed pipeline construction across the Sound are expected to be short-term and minor. Impacts include limited accessibility to certain areas for recreational fishing and the temporary disruption to habitat of recreational fish species in the vicinity of construction. Once construction has been completed in an area, recreational fish species would be expected to return to these areas, and access for recreational fishing would be allowed to resume.

Commercial/Recreational Vessel Navigation

Minor short-term impacts to commercial and recreational vessel traffic in the Sound would result during construction, when construction barges, boats, and tender vessels would be working in the Sound. Potential impacts include increased potential for vessel collisions, harbor congestion, and disturbance from noise or vessel wakes. Iroquois would coordinate its offshore construction scheduling and activities with the U.S. Coast Guard and various Port Authorities, and comply with navigation regulations and precautions throughout the construction period to minimize traffic and safety impacts. Iroquois would also ensure that a Notice to Mariners was issued with construction details. The construction ROW should remain visible during all hours of the day, and ongoing communication would be maintained with vessels in the vicinity of the project. No significant impacts regarding these issues would result from operation of the pipeline because the pipeline would be buried up to half of its diameter in the sea floor.

The CTDEP has indicated that as part of coastal zone consistency review, the proposed project must meet the various natural resource and use policies, established in Connecticut's Coastal Management Act. Part of this review would consider the potential impacts of the proposed project on navigation, including anchor drops and/or entanglements. Iroquois has indicated that compliance with Connecticut's Coastal Management Act, including consideration of potential impacts by the

proposed project, would be conducted concurrently with Iroquois' application for their structures, Dredging and Fill permit, which would be submitted to the Connecticut Department of Environmental Protection's Office of Long Island Sound Program after the proposed project's final design is complete. Similarly, Iroquois would provide the New York Department of State with coastal zone consistency information, once the FERC has issued the FEIS for the project.

It is possible that construction of the Sound portion of the pipeline could encounter severe winter storms which could affect the navigation and harbor safety of construction vessels and other vessels unrelated to construction. In preparation for potential severe winter storms during construction, a contingency plan should be developed. Therefore, we recommend that:

Iroquois should develop a plan that incorporates storm contingency and harbor or refuge plans during construction of its offshore facilities in consultation with the U.S. Coast Guard and other interested organizations, and file copies of relevant correspondence and the final plan with the Secretary, prior to construction.

Forest Land

The proposed project would traverse approximately 4.4 miles of forest land. Forest clearing during construction of the proposed pipeline would convert approximately 47.8 acres of forested areas to open land, representing a long-term impact. Although this land cleared within the temporary construction ROW would be allowed to revegetate, reestablishment of preconstruction conditions could take several to many years depending on the type of forest cleared. To mitigate impacts to forested land, the proposed pipeline would be located adjacent to existing ROW for approximately 6.5 miles on land, and would overlap these existing cleared areas by 5 to 50 feet, thereby minimizing forest clearing. Forest clearing during construction of aboveground facilities would convert approximately 4.1 acres of forested land to open land, representing a long term impact. Although 3.7 acres of forested land that was cleared for temporary construction of aboveground facilities would be allowed to revegetate, reestablishment of preconstruction conditions could take several to many years, depending on the type of forest cleared. See section 3.5.2 for more details on impacts and mitigation in forested areas.

Open Land

The proposed project would traverse approximately 6.9 miles of open land. Approximately 77.8 acres of open land would be affected by construction of the pipeline, and approximately 41.3 acres would be maintained as permanent ROW. Approximately 10.0 acres of open land would be affected by construction of aboveground facilities, and approximately 2.4 acres would be maintained permanently as open land. Iroquois proposes to implement our Plan and Procedures during construction across open land to minimize and/or avoid potential impacts. Effects of construction on open land are expected to be minor and short term. Following construction, all open land used for the temporary construction ROW and extra work areas would revert entirely to prior use. All open land used for the permanent ROW would be maintained in a generally grassy condition.

Although most land uses would be allowed to continue within the permanent ROW, certain types of uses, such as construction of permanent structures (e.g., house additions, garages, barns, pools) would be prohibited. In addition, nursery tree farms and orchards would be allowed to

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establish trees in the 50-foot-wide permanent ROW, except within a 10-foot-wide herbaceous strip centered over the pipeline and no trees greater than 15 feet in height would be allowed within a 30-foot-wide strip centered over the pipeline. Specific impacts to residential areas are discussed in section 3.8.2.2.

Agricultural Land

The proposed pipeline would traverse approximately 0.7 miles of agricultural lands. Approximately 7.7 acres of agricultural land would be impacted by construction of the pipeline, and approximately 4.3 acres would be maintained as permanent ROW. Short-term impacts to agricultural areas could include the loss of standing crops within the construction work areas and disruption of farm operations in the vicinity of construction for one growing season during the year of construction. Potential long-term impacts include the loss of future crop productivity as a result of soil disturbance. Iroquois would employ our Plan and Procedures to avoid or minimize impacts to agricultural lands. Iroquois would compensate landowners for crop loss and other documented impacts, and monitor crop growth for 2 years to determine whether agricultural lands have returned to their original productivity levels. See section 3.2.2 for more details on impacts and mitigation for actively cultivated soils. Iroquois has indicated that modifications at the Dover Compressor Station would have no permanent impacts to 3.3 acres of prime farmland soils because these areas would be used for temporary staging areas with minimal ground disturbance. Iroquois has indicated that the pipeline would traverse approximately 6.7 miles of prime farmland soils, and 3.3 miles of soils of statewide importance as defined by the NRCS.

Beach

The proposed project would traverse approximately 0.02 miles of beach. Approximately 3.2 acres of beach would be impacted by construction of the pipeline, and approximately 0.4 acres would be maintained as permanent ROW. Iroquois proposes to implement our Plan and Procedures during construction across the beach to minimize and/or avoid potential impacts to the beach. The beach also falls under the New York State Coastal Zone Management Program. Iroquois proposes to meet all stipulations of Coastal Zone Consistency for the State of New York, and attain all appropriate Coastal Zone Consistency permits and concurrence prior to construction (see section 3.8.4 below).

Commercial/Industrial Land

The proposed project would affect approximately 8.3 acres of commercial/industrial land during construction of the Devon Compressor Station. Approximately 3.9 acres would be maintained for operation of the Devon Compressor Station. Effects of construction on commercial/industrial land are expected to be minor and short term. Following construction, all commercial/industrial land used for the temporary construction of the compressor station would revert entirely to prior use. All commercial/industrial land used for the permanent operation of the compressor station would be maintained in a generally grassy condition.

To address and reduce the potential for construction-related impacts to commercial/industrial areas, Iroquois proposes to:

Maintain traffic flow according to specifications made by the Suffolk County Department of Public Works, including all conditions associated with required permits for road crossings;

Identify the road owners, affected residence/business, and local authorities to coordinate the closure of any minor or property access ways, if necessary;

Use barricades and signage to reduce the hazards associated with open trenches;

Control fugitive dust by applying dust suppressants such as water or calcium chloride as needed to dry, exposed soils on the ROW; and,

Minimize the noise effect of construction by using motorized construction equipment that would have functioning mufflers where possible, or by modifying working hours to regulate the noise of construction in sensitive areas.

We believe that Iroquois' proposed measures to address and reduce potential impacts are sufficient for those issues typically associated with construction in commercial/industrial areas.

3.8.2 Residential Areas

3.8.2.1 Existing Environment

Iroquois identified seven existing residences within 50 feet of the construction work areas (see table 3.8.2-1). Three of these existing residences are located within 25 feet of the construction work areas. There are no residences within 50 feet of the Project's facilities proposed in Connecticut.

**TABLE 3.8.2-1
Residences Within 50 Feet of the Construction Work Area**

Facility/State	MP	Approximate Distance from Construction Work Area (feet)	Approximate Distance from Pipeline Centerline (feet)
EASTERN LONG ISLAND EXTENSION			
New York	21.2	44.2	94.2
	21.3	48.2	98.2
	21.4	44.5	94.5
	21.5	25.5	75.5
	21.5	10.9	60.9
	21.6	23.1	73.1
	22.4	0.0	19.0

3.8.2.2 Environmental Consequences

In residential areas, the two primary impacts associated with construction and operation of a pipeline are disturbance during construction and the limitation on development of future buildings or structures on the permanent ROW. Temporary construction impacts could include inconvenience

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caused by noise and dust generated by construction equipment, personnel, and trenching of roads and driveways; ground disturbance of lawns; removal of trees, landscaped shrubs, or other vegetative screening between residences and/or adjacent ROW; potential damage to existing septic systems or wells; and removal of structures such as sheds or trailers, from the ROW. In addition, the presence of open trenches can pose a safety hazard to residents. Permanent impacts would result from the prohibition of future development within the 50-foot-wide permanent ROW, where structures (e.g., house additions, garages, barns, pools) and large, deep-rooted landscaping would be prohibited.

Modifications to the proposed Dover Compressor Station would not create significant impact to land uses in the vicinity of the project. Based on Iroquois' plans to leave the forested buffer in place around the majority of the compressor station property, Iroquois' intentions to implement regrading and landscaping at the compressor station, and the nature of the existing land uses in the vicinity of the property, we believe that modifications to this compressor station would result in minor impacts to the aesthetic qualities of the area.

Construction of the proposed Devon Compressor Station would not result in significant impacts to land uses in the vicinity of the project. Based on Iroquois' intentions to implement regrading and landscaping at the compressor station, and the nature of the commercial/industrial land uses in the vicinity of the property, we believe that this compressor station would result in no impacts to the aesthetic qualities of the area.

Modifications to the existing Brookfield Compressor Station would be compatible with existing land used of the property. Based on Iroquois' intentions to implement regrading and landscaping at the compressor station, and because new construction would be in character with the existing facilities, we believe that modifications to this compressor station would result in minor impacts to the aesthetic qualities of the area.

To address and reduce the potential for construction-related impacts to residences within 50 feet of the construction work area, Iroquois proposes to:

- Leave mature trees and landscaping that are located within the edge of the construction work area unless their removal is necessary for the safe operation of construction equipment;

Restore all lawn areas and landscaping within the construction work area in a manner consistent with FERC requirements and the easement agreements. This restoration work would be completed as quickly as it is feasible after backfilling is completed and would take into account season considerations where appropriate;

Install approximately 100 feet of temporary fencing on either side of the residence along the edge of the construction work area during the open trench phase of the construction or as otherwise agreed to with the landowner; and,

Try to maintain a minimum distance of 25 feet between the residence and the edge of the construction work area. Iroquois anticipates that this would not be possible and that in an estimated three instances, the construction workspace would fall within 25 feet of the residence.

To address and reduce the potential for construction-related impacts to residences within 25 feet of the construction work area, Iroquois proposes to:

- Develop a site-specific construction plan for each property with dimensioned plans as part of the Implementation Plan;

Use a combination of construction specifications specifically written to ensure that the construction trench is not excavated until the pipe is ready for installation, and that the pipe is backfilled upon completion of the pipe installation, and on-site Iroquois inspectors to enforce compliance with these written instructions; and,

Work with these landowners during the design process, once landowner concurrence has been received.

We believe that these recommended measures to reduce impacts are sufficient for Iroquois to address the major impact issues typically associated with construction in residential areas. Iroquois further recognizes that a process would be necessary to facilitate communications with landowners who are affected by the proposed project, including procedures to inform landowners of the construction techniques to be employed through the affected property, anticipated construction schedules, progress to date and schedule changes, methods and contact names for resolving issues of concern, plans for providing safe temporary access during trenching of existing access ways, and the identification of property specific safety concerns. In order to facilitate communication with affected landowners, we recommend that:

Iroquois should develop and implement an environmental complaint resolution procedure. The procedure should provide landowners with clear and simple directions for identifying and resolving their environmental mitigation problems/concerns during construction of the project and restoration of the ROW. Prior to construction, Iroquois should mail the complaint procedures to each landowner whose property should be crossed by the project. In a letter to affected landowners, Iroquois should:

- Provide a local contact that the landowner should call first with their concerns; the letter should indicate how soon a landowner should expect a response;**
- Instruct the landowner that if they are not satisfied with the response to call Iroquois' Hotline; the letter should indicate how soon a landowner should expect a response; and**
- Instruct the landowner that if they are still not satisfied with the response from Iroquois' Hotline, they should contact the Commission's Enforcement at (877) 303-4340.**

In addition, Iroquois should include in weekly/bi-weekly status reports a copy of a table that contains the following information for each problem/concern:

The date of the call

The identification number from the certified alignment sheets of the affected property

The description of the concern/problem; and

An explanation of how and when the problem was resolved, will be resolved or why it has not been resolved.

Site-Specific Issues

A number of site-specific issues for the proposed project were identified from public comments that were compiled on April 26, 2002. These site-specific issues are discussed in greater detail below.

Information provided by the Brookhaven Planning Board indicates that Rose-Breslin Associates, LLC, is planning the development of a 1,043,350 square-foot shopping mall at MP 29.95 along the proposed pipeline. A Draft for this proposed mall has been filed with the Town of Brookhaven's Planning Board. The Brookhaven Planning Board has not yet received information for the schedule of the proposed mall development. Iroquois anticipates that the final project alignment across this property would be coordinated with the final mall development plan that is approved by the Brookhaven Planning Board, and may affect an alternate cross-over for the William Floyd Parkway at MP 29.95.

Mr. Edward Avery MP 22.35 expressed concerns that construction would disturb or harm his preserve for exotic parrots located near the proposed project along the William Floyd Parkway. Although construction activities would cause increased noise periodically and may endure for a number of days at a time, we believe that the parrots are likely adapted to a certain level of prolonged noise disturbance due to the preserve's location next to the heavily used highway. However, under Docket No. CP01-384-000, the Islander East Pipeline Company has offered alternative construction methods through the Central Pine Barrens area to avoid a number of resources of concern, including a HDD segment that would eliminate construction within 350 feet of Mr. Avery's property. We believe that this alternative construction technique would minimize impacts to Mr. Avery's parrots and adjacent residential areas, and we recommended that Iroquois investigate the feasibility of HDD in this area (see section 4.4.3).

3.8.3 Recreational and Public Interest Areas

3.8.3.1 Existing Environment

The proposed project would not cross any Native American reservations, national forests, national natural landmarks, nationally designated wild and scenic rivers, wildlife management areas, registered national landmarks, or state forests. The proposed project would, however, cross several recreational and public interest areas. The existing environments of these areas are more fully described in table 3.8.3-1.

The majority (about 78 percent) of the land traversed by the proposed project, including the submerged lands within the Sound, is owned by or under the jurisdiction of public entities. Overall, 56 percent is owned by Federal entities, 11 percent is owned by state entities, and 1 percent is owned by local public entities. The remaining 22 percent of all areas crossed is privately owned. All of the proposed aboveground facilities would be sited on private lands, and easements would be acquired from public and private landowners for installation of the pipeline. Table 3.8.3-2 summarizes the locations and crossing lengths of public lands along the project.

Hazardous Waste Sites

Iroquois reviewed various Federal and state databases, and contacted Federal and state agencies to identify contaminated sites and landfills in the vicinity of the proposed project. Eight sites where potential groundwater contamination may be present and where remedial activities are either planned, ongoing, or have been completed were identified as a result of this review (see table 3.8.3-3).

3.8.3.2 Environmental Consequences

One of the primary concerns in crossing recreational and public use areas is the impact of pipeline construction and operation on recreational activities. Disruption and noise during construction could be a nuisance to recreationalists and cause disturbance to wildlife, especially in protected areas. Due to the practice of scheduling on-shore pipeline construction during the summer months when recreational use is at its peak, this impact can be to a large extent, unavoidable. However, the periods of any one phase of active construction (i.e., clearing, grading, trenching, etc.) in any one area are intermittent and relatively short (generally between 1 and 5 days), therefore limiting the duration of disturbance. In addition, Iroquois has selected the pipeline route through most of these parks and recreational areas to avoid the actively used portions of land, therefore reducing the potential for impacts.

Site-Specific Issues

Following construction, the affected areas would be restored and seeded, and recreational activities could resume. Revegetation of the ROW is generally completed within one growing season, except in forested areas, where reforestation could take longer, depending on existing conditions.

Table 3.8.3-1 lists each identified recreation and public interest area, crossing distances, potential impacts, and mitigation measures proposed by Iroquois for each crossing. In addition, we have noted below several specific areas identified during the public scoping period that may require additional mitigation measures.

TABLE 3.8.3-1

Special Use Areas Crossed by or in the Vicinity of the ELI Project

Special Use Area	MP	Distance Crossed	Landowner/ Manager	Description of Area	Potential Impact and Applicant's Proposed Mitigation
Long Island Sound					
Long Island Sound	0.0-0.2	936 ft	Fairhaven Clam & Lobster Co., LLC	Commercial shellfishing associated with Shellfish Lease Bed L-580	<p>The proposed project would have a direct impact on this shellfish bed. Iroquois proposes to reduce this impact with the following measures:</p> <ul style="list-style-type: none"> - Construct the offshore pipeline during winter months; - Notify impacted groups of the exact location of the pipeline alignment and construction corridor prior to construction; - Coordinate and communicate with impacted groups on timing and scheduling of construction; - Evaluate potential construction methods to minimize disruption to shellfish harvesting and reproduction; and, - Conduct sediment deposition studies to define potential areas of impact.
Long Island Sound	Within 1 mile of MP 0.0	0 ft	Multiple Owners:	Commercial shellfishing associated with: Briarpatch ENT Inc.	<p>The proposed project may have an indirect impact on this shellfish bed. Iroquois proposes to reduce potential impacts with the following measures:</p> <ul style="list-style-type: none"> - Construct the offshore pipeline during winter months; - Notify impacted groups of the exact location of the pipeline alignment and construction corridor prior to construction; - Coordinate and communicate with impacted groups on timing and scheduling of construction; - Evaluate potential construction methods to minimize disruption to shellfish harvesting and reproduction; and, - Conduct sediment deposition studies to define potential areas of impact.
			Briarpatch ENT, Inc.	Shellfish Lease Bed L-579	
			Robstock	Shellfish Lease Bed L-487	
			Salce Salce Dezenzo and Briarpatch ENT, Inc.	Shellfish Lease Bed L-508	

TABLE 3.8.3-1 (continued)
Special Use Areas Crossed by or in the Vicinity of the ELI Project

Special Use Area	MP	Distance Crossed	Landowner/ Manager	Description of Area	Potential Impact and Applicant's Proposed Mitigation
Long Island Sound	0.0-17.1	17.1miles	NA	Commercial fishing	<p>Impacts to commercial fishing are expected to be short-term and minimal, associated primarily with temporary interruption of access to commercial fishing areas, and to temporarily displace commercial fish species during construction. To reduce these impacts, Iroquois proposes to:</p> <ul style="list-style-type: none"> - Construct the offshore pipeline during the winter months; - Consult with local fishermen in regard to project scheduling; -Publicly advertise the project to allow fishermen to remove any fixed fishing gear from the construction area prior to construction activities; -Notify commercial fishermen to request that gear be deployed away from the construction area; - Coordinate offshore construction scheduling with the U.S. Coast Guard, with regard to the location of construction and the length of time the construction would be in a given area; -Issue a Notice to Mariners with all pertinent construction information and scheduling; and, - Maintain communication with all commercial fishing vessels in the vicinity of the construction area.

TABLE 3.8.3-1 (continued)
Special Use Areas Crossed by or in the Vicinity of the ELI Project

Special Use Area	MP	Distance Crossed	Landowner/ Manager	Description of Area	Potential Impact and Applicant's Proposed Mitigation
Long Island Sound	0.0-17.1	17.1miles	NA	Commercial fishing for lobster	<p>Impacts to lobstering are expected to be short-term and minimal, associated primarily with temporary interruption of access to lobstering areas, and to temporary displacement of lobsters during construction. To reduce these impacts, Iroquois proposes to:</p> <ul style="list-style-type: none"> -Construct the pipeline during the winter months; -Notify the Long Island and Connecticut Lobstermen's Associations of the exact location of the proposed pipeline alignment and construction corridor prior to construction; - Advise the Lobstermen's Associations of the size of the lay barge and support vessels within the construction spread; - Advise the Lobstermen's Associations of the construction schedule and to update scheduling changes to facilitate removal of lobster pots within the ROW prior to construction; and, - Investigate whether a lobsterman should act as a spotter on the lay barge during construction to identify and move fishing gear within the construction area.
Long Island Sound	0.0-17.1	17.1miles	NA	Recreational fishing	<p>Impacts to recreational fishing are expected to be short-term and minor, associated primarily with temporary interruption of access to recreational fishing areas, and to temporarily displace recreational fish species during construction. To reduce these impacts, Iroquois proposes to construct the offshore pipeline during the winter months, when charter boats are least active.</p>

TABLE 3.8.3-1 (continued)
Special Use Areas Crossed by or in the Vicinity of the ELI Project

Special Use Area	MP	Distance Crossed	Landowner/ Manager	Description of Area	Potential Impact and Applicant's Proposed Mitigation
Offshore shipping lanes in Long Island Sound	0.0-17.1	17.1 miles	NA	Commercial Shipping and Vessel Traffic	<p>Impacts to commercial shipping are expected to be short-term and minor, and are expected to be limited to the construction phase only. To mitigate potential impacts, Iroquois proposes to:</p> <ul style="list-style-type: none"> - Follow all navigational regulations and precautions of the various Port Authorities and the U. S. Coast Guard to avoid impeding vessel traffic and to avoid vessel collisions; - Coordinate with the U.S. Coast Guard regarding all construction related activities and related construction scheduling ; - Issue a Notice to Mariners prior to construction; and, - Light all vessels contained within the construction spread at night for clear visibility by other vessels in the vicinity.
Long Island Sound	0.0-17.	0 miles	NA	Ferry traffic and guided boat tours of Long Island Sound	No impacts are expected. Ferry routes are located more than 10 miles from the proposed project. Iroquois proposes to construct offshore pipeline during winter months when tour boats are not active.
Long Island Sound	0.0-17.	0 miles	NA	Mooring areas, anchorage areas, and lightering areas	The proposed project would not traverse any of these areas, and no impacts are expected.
Open Water Disposal Sites in Long Island Sound	0.0-17.1	0 miles	NAO	Sites used for disposal of sediments dredged from harbors and navigation channels in Connecticut, northern Long Island, eastern New York City and Westchester County.	The proposed project would not cross any area identified on NOAA charts as a designated dumping ground, and there would be no impacts on open water disposal sites.

TABLE 3.8.3-1 (continued)
Special Use Areas Crossed by or in the Vicinity of the ELI Project

Special Use Area	MP	Distance Crossed	Landowner/ Manager	Description of Area	Potential Impact and Applicant's Proposed Mitigation
Suffolk County, New York					
Wading River Marsh	Within 0.6 miles of MP 17.1	0 miles	New York Department of State	200 acres of significant Coastal Fish and Wildlife Habitat, as defined in New York State's Coastal Zone Management Program.	No impacts are expected by the proposed project, as the project does not traverse the Wading River Marsh.
Central Pine Barrens	18.7-26.9 and 27.1-27.6	8.2 miles and 0.5 miles	Central Pine Barrens Joint Planning and Policy Commission	100,000 acres of oak/pine forest containing unique, regionally rare and globally rare communities in wetland and upland areas which support a high diversity of rare species, including many which are species of special emphasis. A Compatible Growth Area contains 47,500 acres; a Core Protection Area contains 52,500 acres.	The proposed project would traverse 5.8 miles of Core Preservation Area in the Central Pine Barrens, with temporary construction impacts to 24.8 acres, and permanent impacts to 15.2 acres. The proposed project would traverse 2.9 miles of Compatible Growth Area in the Central Pine Barrens, with temporary construction impacts to 91.6 acres, and permanent impacts to 47.2 acres. Impacts to the Core Preservation Area and the Core Growth Area are expected to result from minor tree clearing along the edges of these areas. Tree clearing would occur in the construction and permanent ROWs, and would be allowed to revert to pre-construction conditions in the construction ROW following completion of the project. Iroquois proposes to use standard upland construction methods, to assess workspace needs to identify opportunities to minimize clearing, and to continue consulting with the Central Pine Barrens Joint Planning and Policy Commission.

TABLE 3.8.3-1 (continued)
Special Use Areas Crossed by or in the Vicinity of the ELI Project

Special Use Area	MP	Distance Crossed	Landowner/ Manager	Description of Area	Potential Impact and Applicant's Proposed Mitigation
Brookhaven State Park	18.9-21.1	2.2 miles	State of New York, Office of Parks, Recreation and Historic Preservation	6,000 acres of undeveloped state parkland consisting of oak/pine habitats with scattered wetland, contained within the Central Pine Barrens.	Portions of the construction ROW for the proposed project would impact approximately 2.91 acres of park land. This impact is expected to be temporary, as this area would be allowed to revert to pre-construction conditions. Iroquois proposes to consult with the State of New York Office of Parks, Recreation and Historic Preservation to minimize any impacts to the park as a result of construction and operation activities.
Rocky Point State Natural Resources Management Area	3.0 miles west of MP 20.0	0 miles	New York State Department of Environmental Conservation, Division of Fish, Wildlife, and Marine Resources	6,000 acres of pine-oak forest habitat that has been developed with trails for a variety of recreational activities.	No impacts are expected by the proposed project, as the project does not traverse the Rocky Point State Natural Resources Management Area.
Middle Island Game Farm	0.4 miles west of MP 21.8	0 miles	New York State Game Conservation Department	Approximately 100 acres of land set aside for breeding quail, and raising Northern bobwhite and ring-necked pheasant, which are then distributed through various registered sportsmen's organizations.	No impacts are expected by the proposed project, as the project does not traverse the Middle Island Game Farm.

TABLE 3.8.3-1 (continued)
Special Use Areas Crossed by or in the Vicinity of the ELI Pipeline Project

Special Use Area	MP	Distance Crossed	Landowner/ Manager	Description of Area	Potential Impact and Applicant's Proposed Mitigation
Peconic River and Peconic River Scenic Corridor	22.6-24.2	.6 miles	State of New York	State-designated scenic river.	No long-term or permanent impacts are anticipated on scenic or visual resources, on water quality, or on biological communities as a result of the project. Iroquois proposes to install the proposed pipeline either above or beneath the existing culvert, using either a typical bore cut or by an open cut method. All construction would be located within the existing cleared and maintained ROW for the William Floyd Parkway. Iroquois proposes to consult with the appropriate state agencies to ensure that the proposed project is within attainment of all applicable state laws and regulations. Iroquois would implement our Plan and Procedures to further reduce and/or avoid any potential impacts to the Peconic River/Peconic River Scenic Corridor.

TABLE 3.8.3-1 (continued)
Special Use Areas Crossed by or in the Vicinity of the ELI Project

Special Use Area	MP	Distance Crossed	Landowner/ Manager	Description of Area	Potential Impact and Applicant's Proposed Mitigation
Brookhaven National Laboratory (BNL)	22.7-26.0	3.3 miles	Brookhaven Science Associates, for the U.S. Department of Energy	5,265-acre property, located in the Central Pine Barrens. Approximately 1,650 acres of the property have been developed for basic, non-defense related, multidisciplinary scientific research laboratory and associated facilities. The remaining acreage is undeveloped pine barrens.	Short-term impacts to the BNL are expected to result from minor tree clearing along the edge of the construction ROW. Tree clearing would occur only in the construction ROW, and would be allowed to revert to pre-construction conditions following completion of the project. Iroquois would consult and coordinate with BNL regarding construction schedules and activities. Iroquois would obtain the necessary permits from the U.S. Department of Energy to cross BNL grounds.
Robert Cushman Murphy County Park	1.5 miles west of MP 23.7	0 miles	Suffolk County, New York	3,000-acre natural park, containing rare habitats such as coastal plain pondshore and beaded (kettlechain) tributary ponds, and developed for public recreational activities such as fishing, boating, hiking and hunting.	No impacts are expected by the proposed project, as the project does not traverse the Robert Cushman Murphy County Park.

TABLE 3.8.3-1 (continued)
Special Use Areas Crossed by or in the Vicinity of the ELI Project

Special Use Area	MP	Distance Crossed	Landowner/ Manag	Description of Area	Potential Impact and Applicant's Proposed Mitigation
Carmans River and Carmans River Scenic Corridor	27.1-27.6	0.5 miles	State of New York	State-designated scenic river	No long-term or permanent impacts are anticipated on scenic or visual resources, on water quality, or on forested areas as a result of the project. Iroquois proposes to install the proposed pipeline beneath the Carmans River and its associated Scenic Corridor using HDD methods to avoid negative impacts to the Carmans River/Carmans River Scenic Corridor. Entry and exit locations for the HDD methods would be located outside of the Carmans River Scenic Area. Iroquois proposes to consult with the appropriate county and state agencies to ensure that the proposed project is within attainment of all applicable county and state laws and regulations. Iroquois would implement our Plan and Procedures to further reduce and/or avoid any potential impacts to the Carmans River/Carmans River Scenic Corridor.

TABLE 3.8.3-1 (continued)
Special Use Areas Crossed by or in the Vicinity of the ELI Project

Special Use Area	MP	Distance Crossed	Landowner/ Manager	Description of Area	Potential Impact and Applicant's Proposed Mitigation
Southaven County Park	27.1-27.6	0.4 mi	County of Suffolk	1,356-acre parkland consisting of pine-oak forest which has developed for various recreational activities such as picnicking, hiking, camping, freshwater fishing, hunting, trap and skeet shooting, horse-back riding, and canoeing, including boat rentals.	No long-term or permanent impacts are anticipated on the Southaven County Park. Iroquois proposes to install the proposed pipeline across the park using HDD methods to avoid negative impacts. Entry and exit locations for the HDD methods would be located outside of the park. Iroquois proposes to consult with the appropriate county and state agencies to ensure that the proposed project is within attainment of all applicable county and state laws and regulations. Iroquois would implement our Plan and Procedures to further reduce and/or avoid any potential impacts to

NA = not applicable.

TABLE 3.8.3-2

Federal, State, and Locally Owned Land Crossed by the ELI Project

	Beginning MP	Approximate Crossing Length (feet)	Ownership Type	Description
GEOGRAPHIC AREA				
Connecticut	0.0	39,600	State	Long Island Sound ^{a/}
Subtotal		39,600		
New York	7.5	50,688	State	Long Island Sound ^{a/}
	18.92	11,722	State	Brookhaven State Park ^{b/}
	22.66	17,371	Federal	Brookhaven National Laboratory ^{b/}
	27.13	2,323	Local	Southaven County Park ^{b/}
Subtotal		82,104		
JURISDICTION				
Federal		17,371	= 3.3 miles	
State		102,010	= 19.3 miles	
Local		2,323	= 0.4 miles	
TOTAL		121,704	= 23.0 miles	

^{a/} Submerged lands within Long Island Sound are under the jurisdictions of the states of Connecticut and New York (limited areas are under the jurisdiction of towns as shellfish lease areas).

^{b/} Includes only those areas where ground disturbance work is required.

Silver Sands State Park

The Connecticut Department of Environmental Protection has indicated that the existing pipeline enters Long Island Sound through Silver Sands State Park, in New Haven County, Connecticut. Although there would be no pipeline construction on shore in the State of Connecticut, the Department of Environmental Protection has raised a concern that increased compression of natural gas in the existing pipeline may increase pipeline pressure. They have requested that Iroquois verify that the existing pipeline in this area has been designed and constructed for the new higher pressure. They have also requested that Iroquois indicate whether the existing easement for the pipeline would have to be amended or modified to accommodate operating pressure changes. Finally, they have requested that Iroquois should describe and evaluate any construction staging that may be planned in Silver Sands State Park. Iroquois has indicated that pressure within the existing pipeline would not be increased beyond its current allowable operating pressure. We have requested that Iroquois consult with the CTDEP regarding their additional concerns, and file documentation of this correspondence with the Secretary.

TABLE 3.8.3-3
Contaminated Sites and Landfills Located Within One Mile of the ELI Project

Facility	Approximate MP	Type of Site	Name of Site	Distance and Orientation from Project
BROOKFIELD COMPRESSOR STATION				
Connecticut	NA	Unidentified	Unidentified	68.4-acre parcel on which the Brookfield Compressor Station would be constructed.
DEVON COMPRESSOR STATION				
Connecticut	NA	CERCLIS (received RCRA Clean Closure Certificate)	Northeast Electronics Corp.	4,000 feet south of the compressor station at 25 Caswell St.
	NA	Solid waste facility	Milford Transfer Station	Within 0.5 miles west of the compressor station, on a downgradient.
	NA	Solid waste facility (concern that site may have contaminated groundwater)	D'Addario Landfill	Within 0.5 miles east of the compressor station, on an upgradient.
EASTERN LONG ISLAND EXTENSION				
New York	18.7	NYSDEC Inactive Hazardous Waste Site	Peerless Photo Products	1.4 miles (5,500 feet) west of the proposed pipeline at the intersection of Randall Road and Route 25A.
	22.7-26.0	Federal Superfund Site (NPL and CERCLIS-listed), NYSDEC Hazardous Waste Site	Brookhaven National Laboratory	Further than 1.0 miles from proposed pipeline.
	26.0	NYSDEC Inactive Hazardous Waste Site	Precision Concepts	0.76 miles (4,000 feet) southeast of the proposed pipeline at 26 Natcon Drive.
	27.1	NYSDEC Inactive Hazardous Waste Site	Yaphank Railroad	0.34 miles (1,800 feet) south of the proposed pipeline.

Notes:

CERCLIS = Comprehensive Environmental Response, Compensation and Liability Information System (U.S. EPA).
 NPL = National Priority List (U.S. EPA).
 NYSDEC = New York State Department of Environmental Conservation
 RCRA = Resource Conservation and Recovery Act of 1976

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Central Pine Barrens of New York

As identified in Table 3.8.3-1, the proposed project would cross the Central Pine Barrens of New York between MP 18.7 and MP 26.9 (8.2 miles) and between MP 27.1 and MP 27.6 (0.5 miles), for a total crossing length of 8.7 miles. The 102,500-acre Central Pine Barrens was established under the Long Island Pine Barrens Protection Act of 1993, an amendment of the New York State Environmental Conservation Law, Article 57, "the Long Island Pine Barrens Maritime Reserve Act" of 1990 (Chapter 814 of the state laws of 1990), which was designed to protect and preserve the hydrologic and ecologic integrity of the Central Pine Barrens area. This area was created as a forest preservation area, and contains the largest remnant of forest that is thought to have once encompassed over a quarter-million acres on Long Island. This area is administered by the CPBJPPC, a state agency that acts as a regional land use board to review and approve applications for development in the Central Pine Barrens. According to state law, all proposed development within the Central Pine Barrens must be consistent with the Central Pine Barrens Comprehensive Land Use Plan of June 1995, unless the CPBJPPC grants an exemption for the development due to "hardship," a determination that the activity does not constitute "development," or the activity is determined to be necessary due to compelling public need.

The Central Pine Barrens Comprehensive Land Use Plan divides the land area into two designated areas for the purpose of managing development: a Core Preservation Area (CPA) encompassing 54 percent of the total land area of the Central Pine Barrens, and a Compatible Growth Area (CGA) encompassing 46 percent of the total land area. The allowable uses in the CPA are generally limited to those uses which do not constitute "development," which is prohibited by law in the CPA. Allowable uses in the CGA are defined to allow appropriate growth consistent with certain standards for protection of natural resources. Approximately 5.8 miles of the 8.7 miles of pipeline that traverse the Central Pine Barrens would be located within the CPA, and the remaining 2.9 miles of the pipeline would be located within the CGA.

Because of the nature of this environmentally sensitive area, the proposed project has been aligned adjacent to the existing ROW of the William Floyd Parkway for most of its 8.7-mile distance through the Central Pine Barrens to minimize any long-term impacts in the Central Pine Barrens. In particular, impacts to parts of the CPA and the CGA can be expected to result from tree clearing along the edges of these areas. The location of the proposed project adjacent to existing right-of-way within the Central Pine Barrens would serve to reduce the long-term impacts associated with tree clearing in the Central Pine Barrens, which would occur in the construction and permanent ROW, although cleared areas in the construction ROW would be allowed to revert to pre-construction conditions following completion of the project.

Iroquois proposes to further minimize potential impacts within the Central Pine Barrens by using standard upland construction methods in accordance with our Plan and Procedures, by assessing workspace needs to identify opportunities to minimize tree clearing, and by continuing to consult with the CPBJPPC to address further concerns. Iroquois is currently considering the following specific mitigation measures to minimize the amount of tree clearing that would be necessary in the Central Pine Barrens, including:

Collocating both the construction and permanent ROW within the William Floyd Parkway ROW to the maximum extent possible to minimize encroachment into adjacent forested areas;

Consulting with the Suffolk County Department of Public Works, and coordinating with the NYDOT, to utilize breakdown lanes and single-lane traffic options to further minimize the amount of temporary workspace necessary for the project within the Central Pine Barrens;

Selectively removing trees that may pose specific safety risks from both the temporary and the permanent ROW, and concurrently marking and protecting trees to be preserved within the temporary and permanent ROW; and,

Condensing the temporary workspace needed within forested areas of the Central Pine Barrens by identifying specific areas where alternative temporary work space could be utilized.

The Pine Barrens Commission has expressed numerous concerns regarding the incompatibility of pipeline development in the Central Pine Barrens Area, including designated Core Preservation Areas and Compatible Growth Areas. They have requested that cumulative impacts from both existing and proposed pipelines be evaluated in the DEIS, including land use issues associated with the compatibility of the project with current land use within the Central Pine Barrens Area, the development of new rights-of-way, the expansion and/or sharing of existing rights-of-way, uncontrolled access and use of right-of-way by all-terrain vehicles (ATVs), impacts to visual resources, and clearing and fragmentation of forested areas.

The New York State Office of Parks, Recreation and Historic Preservation (NYSOPRHP), noting that the Field Services Bureau of the Division of Historic Preservation has been consulted with regard to archaeological resources, has indicated that the Division of State Parks should also be consulted with regard to the location of the proposed project in the Central Pine Barrens area, to allow them to evaluate the potential for impacts by the proposed project on State parkland. Specific concerns of the Division of State Parks include potential impacts to State parkland, including visual impacts, due to vegetation removal. To properly evaluate the effects of the proposed project on State parkland, the Division of State Parks has requested that the Draft EIS identify acreage estimates for clearing and use for the construction of the proposed project, measures to reduce the amount of tree clearing, revisions to construction procedures or reduction in workspace, and restoration plans, including planned revegetation techniques and species.

With regard to the siting of the proposed project, we believe that the pipeline's proposed location within the existing ROW of the William Floyd Parkway and the Long Island Expressway, generally a distance of 30 feet from the edge of the pavement of the travel lane on William Floyd Parkway's travel lane, and 15 feet from the edge of pavement on Long Island Expressway, is compatible with current land uses in this part of the Central Pine Barrens, and serves to reasonably reduce tree clearing while also minimizing construction-related traffic impacts. Areas of new ROW within the Central Pine Barrens (totaling approximately 1.3 miles) would be created where the pipeline route would shift to avoid steep slopes (between MPs 19.5 and 19.6 and between MPs 24.9 and 25.8), and a recharge drainage basin and landscaping at the entrance of Brookhaven National

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Laboratory (between MPs 24.6 and 25.8). For the area along the William Floyd Parkway, between MPs 24.9 and 25.8, Iroquois proposes to locate the pipeline approximately 100 feet from the road to avoid the need for extensive grading and disturbance of steep, sandy road banks, and the resulting traffic impacts, which would be required for the safe operation of construction equipment in this area. We believe this routing is acceptable in this area. Because most of the remainder of the proposed pipeline through the Central Pine Barrens would be within or adjacent to the existing cleared ROW of the William Floyd Parkway, the proposed project would create a minimal amount of new corridor, particularly with regard to corridor width, and would reduce the amount of resultant forest fragmentation in this area.

As noted above, Iroquois has initiated consultation with the CPBJPPC regarding the project. During this initial consultation, the CPBJPPC expressed particular concerns regarding the potential for substantial clearing of native vegetation as a result of the proposed project, as addressed above. Iroquois has indicated that they will continue to consult with the CPBJPPC regarding the proposed project, including providing the CPBJPPC with the filing date of the Environmental Resource Reports with the FERC, as well as providing copies of Iroquois' Environmental Resource Reports and the Application for a Certificate of Public Convenience and Necessity. In keeping with the Commission's policy to encourage the continued cooperation between interstate pipelines and state and local authorities, we believe that continued consultation with the CPBJPPC would alleviate many of the CPBJPPC's specific concerns. We also believe that further consultation with the NYSOPRHP's Division of State Parks would alleviate many of the Division of State Parks' specific concerns. Therefore, we recommend that:

Iroquois should continue to consult with the CPBJPPC and the Division of State Parks at the NYSOPRHP concerning construction through the Central Pine Barrens. If mitigation is required by any agency for the construction in the Central Pine Barrens, Iroquois should file copies of the final mitigation plan and any related correspondence with the Secretary, prior to construction.

In addition to further consultation with the CPBJPPC, we have recommended that Iroquois use alternative construction techniques to reduce the amount of workspace and clearing that would be required to construct the proposed project through the Central Pine Barrens. We have recommended that Iroquois use the HDD construction method between the following mileposts, all within the Central Pine Barrens: 21.1-21.9, 22.9-23.8, and 25.2-25.6. By adopting these project modifications, the amount of forested areas impacted by the proposed ELI Project in the CPAs would be reduced by 80 percent, and the amount of forested areas impacted in the CGAs would be reduced by 24 percent.

Although the amount of new corridor would be minimal within the Central Pine Barrens, the potential for use of the ROW by ATVs as a result of the project is an occurrence that has been observed on numerous other utility line projects. Iroquois has indicated that it would develop a plan to control or limit potential ATV use and damage on its ROW that is consistent with our requirements. Therefore, we recommend that:

- **Iroquois should develop a plan that indicates how it would control or limit potential all-terrain vehicle use and damage on its ROW in consultation with affected landowners and the CPBJPPC along the ROW, and file a copy of the final plan with the Secretary, prior to construction.**

Brookhaven State Park

As identified in Table 3.8.3-1, the project would cross Brookhaven State Park between MPs 18.9 and 21.1, for a total crossing length of 2.2 miles. Also as identified above, portions of the construction ROW for the proposed project would impact approximately 2.91 acres of park land within Brookhaven State Park. This impact is expected to be temporary, as this area would be allowed to revert to pre-construction conditions. The NYSOPRHP has expressed concern that routing the pipeline through the park would result in potential construction impacts, including the length of revegetation of the construction corridor in forested areas of the park (estimated at between 1 and 150 years), and visual impacts. As such, the NYSOPRHP has requested that the EIS assess the impacts on all public lands and open space, including visual and vegetation impacts; include clear appropriately scaled maps showing the pipeline route in relation to public boundaries; and provide an acreage estimate for how much land would be cleared/used for the construction ROW that parallels the William Floyd Parkway. Iroquois has proposed to consult with the NYSOPRHP to minimize any impacts to the park as a result of construction and operation activities. The NYSOPRHP has indicated that this consultation should include the identification of measures that minimize tree clearing during construction activities, revisions to construction procedures or reduction in the proposed workspace, and restoration plans, including planned revegetation techniques and species. The NYSOPRHP has requested copies of the DEIS for further review and comment.

Hazardous Waste Sites

Based on Iroquois' search of publicly available databases, eight sites having potential hazardous wastes and/or contaminated soils or groundwater were identified within 1.0 mile of the proposed project. Iroquois has determined that construction and excavation activities are unlikely to encounter contaminated soil or groundwater in seven of these sites and no special mitigation measures for these seven sites have been developed. Iroquois indicated that additional consultation with the CTDEP will be necessary for the eighth site, the D'Addario Landfill, to determine the potential impacts of possible groundwater contamination from the D'Addario Landfill on the proposed construction of the Devon Compressor Station.

It is possible that construction activities associated with the proposed project could encounter areas containing contaminated soils and/or groundwater and some that have not been previously identified and listed on Federal or state databases, or been brought to the attention of Federal and state agencies. To address the potential for encountering existing or previously unidentified areas of soil/groundwater contamination, we believe that Iroquois should implement agency notification procedures for the proposed project. Therefore, **we recommend that:**

Iroquois should develop a plan for notifying Federal, state and local agencies, including the U.S. EPA, CTDEP and NYSDEC, in the event that soil and/or groundwater contamination is encountered during construction. This plan should

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be developed in compliance with Federal, state and local laws, and identify the appropriate avoidance, remediation, or mitigation measures that would be implemented. Iroquois should file a copy of this plan and any correspondence regarding it with the Secretary, prior to construction.

3.8.4 Coastal Zone Management

Portions of the proposed project are located within the coastal zone, and fall under the Coastal Zone Management Program. The Coastal Zone Management Program is authorized by the Coastal Zone Management Act of 1972 and administered at the Federal level by the Coastal Programs Division within the National Oceanic and Atmospheric Administration's Office of Ocean and Coastal Resource Management.

The consistency provisions of the Federal Coastal Zone Management Act of 1972 require activities to be consistent with each state's federally approved Coastal Management Program. In New York State, the Department of State's Division of Coastal Resources reviews projects and activities for consistency with the policies of New York State's Coastal Management Program and approved Local Waterfront Revitalization Programs. In Connecticut, the Department of Environmental Protection's Office of Long Island Sound Programs administers and coordinates programs that have an impact on the Sound and related coastal lands and waters, including determining consistency of coastal projects within Connecticut.

Iroquois has approached both review agencies regarding consistency of the proposed project within the Coastal Zone Management Program. Connecticut has indicated that Iroquois should file coastal zone consistency information concurrent with the application for a Structures, Dredging, and Fill permit, which would not be submitted until the final design for the project is complete. New York has indicated that Iroquois should file coastal zone consistency information only after we have issued the FEIS for the project. Therefore, we recommend that:

Iroquois should file documentation of concurrence from the New York and Connecticut agencies for its Certification of Consistency with the New York and Connecticut Coastal Zone Management Programs with the Secretary, before construction.

Iroquois has also approached the CTDEP and NYSDEC with regard for the need for sediment plume analysis or modeling to determine the potential water column impacts from construction. The NYSDEC has indicated that no modeling is needed at this time, because Iroquois proposes to plow the proposed pipeline in Long Island Sound. The CTDEP has indicated that no sediment plume analysis is needed at this time.

3.8.5 Visual Resources

3.8.5.1 Existing Environment

The proposed pipeline traverses two state-designated visual resource areas along the proposed Eastern Long Island Extension Project: the Peconic River Scenic Corridor and the Carmans River Scenic Corridor. The proposed pipeline also traverses three additional visual

resource areas identified in the Central Pine Barrens Comprehensive Land Use Plan: the William Floyd Parkway, the Brookhaven State Park, and the Southaven County Park. One of the proposed aboveground facilities, the mainline valve at MP 22.7, would be located within the Peconic River Scenic Corridor and the William Floyd Parkway visual resource area. These visual resource areas are described in greater detail below.

Peconic River Scenic Corridor

The Peconic River Scenic Corridor (MP 22.6 to MP 24.2) has been designated by New York State as a Scenic River under the Wild, Scenic, and Recreational Rivers Act of 1972. The purpose of this act is to encourage the preservation and restoration of these rivers' outstanding natural resource qualities. Such Scenic Rivers are defined as generally "free of diversions or impoundments, with limited road access. These river areas are essentially primitive and undeveloped or are partially or predominantly used for agriculture, forest management or other dispersed human activities, which do not substantially constrain public use and enjoyment of the rivers and their shores." The Scenic River designation established statewide regulations for the management, protection, enhancement, and control of land use and development in such river areas.

Scenic views of and from the Peconic River in the vicinity of the proposed project are of the largely undisturbed upper end of the river's watershed. Because the river is classified as an intermittent waterbody in the vicinity of the proposed project, opportunities for visual appreciation of the aesthetic qualities of the scenic corridor during recreational activities such as fishing and canoeing are limited.

Carmans River Scenic Corridor

Similarly, the Carmans River Scenic Corridor (MP 27.1 to MP 27.6) also has been designated by New York State as a Scenic River under the Wild, Scenic, and Recreational Rivers Act of 1972. Opportunities for scenic views of and from the Carmans River abound in the vicinity of the proposed pipeline. Scenic views are associated with recreational activities along the river such as hunting, fishing and canoeing, as well as with an extensive trail and road system along the Carmans River.

William Floyd Parkway

The Central Pine Barrens Comprehensive Land Use Plan's Scenic Resources Inventory has identified the William Floyd Parkway (MP 18.7 to MP 26.0) as a visual resource. Such visual resources are defined as "those landscape patterns and features which are visually or aesthetically pleasing and which therefore contribute affirmatively to the definition of a distinct community or region within the Central Pine Barrens." This visual resource's scenic qualities are derived from an essentially intact buffer of pitch pines and oaks along both sides of the roads, and within the center median. Few curbs of traffic signals disrupt the viewshed along this part of the parkway.

Brookhaven State Park

Similarly, the Central Pine Barrens Comprehensive Land Use Plan's Scenic Resources Inventory has identified the Brookhaven State Park (MP 18.9 to MP 21.1) as a visual resource. This visual resource's scenic qualities are derived from pine/oak forest that can be viewed from the

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William Floyd Parkway, and from the hilly glacial topography in the northern part of the park which contains contours, swales, kettleholes, and ridges, and a variety of forest types and a flat, savannah-like area in the south of the park which can be seen from marked and unmarked trails throughout the park.

Southaven County Park

Similarly, the Central Pine Barrens Comprehensive Land Use Plan's Scenic Resources Inventory has identified the Southaven County Park (MP 27.1 to MP 27.6) as a visual resource. This visual resource's scenic qualities are associated with the opportunities for scenic views of and from the Carmans River in the vicinity of the proposed pipeline as part of recreational activities along the river such as hunting, fishing and canoeing, and from an extensive trail and road system along the Carmans River. The park also has been developed for various recreational activities such as picnicking, hiking, camping, freshwater fishing, hunting, trap and skeet shooting, horse-back riding, and canoeing, including boat rentals, although no recreational facilities are close to the pipeline route.

3.8.5.2 Environmental Consequences

Potential impact on visual resources resulting from construction and operation of the proposed facilities would be of two types: (1) impact from the alteration of terrain and vegetative patterns due to pipeline construction and ROW maintenance; and (2) impact from the construction of permanent new aboveground facilities such as the compressor station, meter stations, and mainline valves.

Pipeline Facilities

Generally, long-term and permanent visual impacts would result where a new ROW corridor would be introduced in forested areas. This impact would be reduced and less noticeable where the new ROW is aligned adjacent to and partly overlapping existing cleared corridors. Over time, trees and shrubs would regenerate outside the permanent ROW and the effects of clearing would become less obvious.

Visual impacts would be reduced along streams and rivers where, following construction, a 25-foot-wide strip of riparian vegetation would be allowed to become established across the ROW, and only a 10-foot-wide strip centered over the pipeline would be maintained in a cleared condition for the life of the project.

About 24.7 miles (85.0 percent) of the Eastern Long Island Extension Project pipeline would be located in open water, open land, agricultural, commercial/industrial, and beach areas where visual impact would be confined to the construction period. Of the remaining 4.4 miles (15.0 percent) of the proposed pipeline, approximately 1.3 miles would require the creation of new ROW on land. In the majority of these areas requiring new ROW, visual impacts would occur because the ROW would be in forested areas associated with the William Floyd Parkway (MPs 18.7 to 26.0) and Brookhaven State Park (MPs 18.9 to 21.1).

The proposed project would cross the Peconic River Scenic Corridor at a point where the river crosses via culvert under William Floyd Parkway, and would be located within the cleared portion of the William Floyd Parkway ROW. Installation of the proposed pipeline would consist of boring above or beneath the existing culvert to avoid disrupting the flow of water or affecting downstream water quality. Thus, while temporary visual impacts to the scenic or aesthetic qualities of the scenic corridor may occur during construction, no permanent visual impacts to the scenic or aesthetic qualities of the scenic corridor would occur during operation of the proposed project.

The proposed project would cross the Carmans River Scenic Corridor using a proposed alignment that would be located within the ROW for the KeySpan Energy Delivery mainline, which is currently under construction. Installation of the proposed pipeline would consist of using HDD methods, to minimize tree clearing and avoid other visual impacts to aesthetic resources in the scenic corridor that are normally associated with open cut methods of construction. Entry and exit locations for the HDD method of installation would be located outside of the scenic corridor, further reducing visual impacts of the proposed project. Thus while minimal temporary visual impacts to the scenic or aesthetic qualities of the river may occur during construction, no permanent visual impacts to the scenic or aesthetic qualities of the scenic corridor would occur during operation of the proposed project.

We received comments from the CPBJPPC and the NYSDEC concerning visual impacts to scenic corridors or visual resources as identified in the Central Pine Barrens Comprehensive Land Use Plans' Scenic Resources Inventory, as discussed above. These visual resources include the William Floyd Parkway, Brookhaven State Park, and Southaven County Park. The Central Pine Barrens Commission indicated concerns that the proposed project would cause the loss of natural buffers and degradation of scenic quality in these areas. The Central Pine Barrens Commission has suggested that Iroquois should identify alternatives to the proposed deforestation, and include revegetation schemes to reestablish trees and other native vegetation that is removed during construction of the proposed project using native plants identified in Chapter 5 of the Central Pine Barrens Comprehensive Land Use Plan. The Central Pine Barrens Commission has also indicated that a viewshed analysis should be included in the DEIS, and should include alternatives to mitigate potential impacts to these visual resources. We have recommended 3 HDD's to reduce impact to vegetation and wildlife habitat and a HDD is proposed for Carmans River which significantly reduces visual impacts to the viewshed in the Central Pine Barrens.

The proposed project would be located adjacent to the cleared portion of the William Floyd Parkway ROW. Installation of the proposed pipeline would require some tree clearing for construction and operation purposes. Cleared areas in the construction ROW would be allowed to revert to pre-construction condition. No new ROW would be created, and although the existing corridor would be widened, this would not significantly alter the visual resources along the William Floyd Parkway. Thus, while temporary visual impacts to this visual resource may occur during construction, no permanent impacts to the scenic or aesthetic qualities of this visual resource would occur during operation of the proposed project.

A portion of the construction ROW for the proposed project would be located adjacent to and within the western edge of the Brookhaven State Park. Installation of the proposed pipeline would require some tree clearing for construction purposes only. These areas would be allowed to revert to pre-construction condition. No additional clearing would be conducted for the operation of the



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proposed project, and no new ROW would be created within the park. The park is undeveloped, with limited or no facilities or activities offered at the park for the public, and no recreational facilities in the park that are in the vicinity of the proposed project. Thus, while temporary impacts to the scenic or aesthetic qualities of this visual resource may occur during construction, no permanent impacts to the scenic or aesthetic qualities of this visual resource would occur during operation of the proposed project.

The proposed project would cross the Southaven County Park using a proposed alignment that would be located within the ROW for the KeySpan Energy Delivery mainline, which is currently under construction. Installation of the proposed pipeline would consist of using HDD methods, to minimize tree clearing and avoid other visual impacts to aesthetic resources in the scenic corridor that are normally associated with open cut methods of construction. Entry and exit locations for the HDD method of installation would be located outside of the scenic corridor, further reducing visual impacts from construction of the proposed project. Thus, while minimal temporary visual impacts to this visual resource may occur during construction, no permanent visual impacts to the scenic or aesthetic of this visual resource would occur during operation of the proposed project.

We believe that the proposed routing of the pipeline adjacent to the existing ROW, limitation of construction workspace to only that required to construct the pipeline safely and effectively, and use of the restoration and operations/maintenance measures identified by Iroquois and specified in our Plan and Procedures are adequate for this area. We believe that the 50-foot-wide permanent ROW is a prudent width to allow for effective visual inspection for safety during operation, such that a reduction in permanent ROW width is not necessary. A forested buffer would still remain along much of the ROW, and woody vegetation would be allowed to return to the temporary workspace areas.

Aboveground Facilities

Aboveground facilities would be the most visible features constructed as part of the project and would result in a long-term visual impact on the landscape. The degree of impact depends on several factors, including the character of the existing landscape, the number of viewpoints from which to observe the facilities, and the number and type of viewers who would be able to view the facilities. Of the new facilities, the compressor stations would be the largest and would therefore have the most potential to be visually intrusive. The proposed meter stations and mainline valves would also result in visual impacts, but these facilities would be significantly smaller and therefore would be less visually intrusive.

The Dover Compressor Station is located in an open space area. Of the 5.7 acres required for construction of modifications to the compressor station, only 2.4 acres would be used for operation. Any views of the modifications would be seen in the context of the existing compressor station facility and existing transmission pipeline ROW. Iroquois intends to keep the surrounding forested buffer intact. No scenic resources have been identified in this area, and the proposed modifications would be consistent with the context of the existing visual characteristics of the area.

The proposed Devon Compressor Station is located in an industrial area. Of the 8.3 acres required for construction of the compressor station, only 3.9 acres would be used for operation. Any views of the compressor station would be seen in the context of the existing industrial land use

surrounding the proposed location, including the existing meter station and pipeline ROW. No scenic resources have been identified in this area, and the proposed compressor station would be consistent with the context of the existing visual characteristics of the area.

The Brookfield Compressor Station is located in an open space area. Of the 3.8 acres required for construction of modifications to the compressor station, only 0.5 acre would be used for operation. Any views of the modifications would be seen in the context of the existing compressor station facility and existing transmission pipeline ROW. No formally designated scenic resources have been identified in this area, and the proposed modifications would be consistent with the context of the existing visual characteristics of the area. Bruno Ricci has indicated that the proposed modifications to the Brookfield Compressor Station would result in visual impacts to surrounding residences, including approximately 70 homes located within the Dairy Farm Estate subdivision, which is located south of the proposed site, across the railroad and pond from the compressor station, and homes on the other side of High Meadow Road. As noted in Section 3.8.2.2, we believe that modifications to this existing compressor station are consistent with current land use and would result in only minor impacts to the aesthetic qualities of the surrounding area.

The proposed meter station at MP 29.1 would be constructed in an upland oak forest area. One of the three proposed mainline valves and the proposed receiver facility are also located at MP 29.1. These facilities would be constructed within the construction ROW for the proposed pipeline, and when in operation, would be inside the permanent ROW for the proposed pipeline. No scenic resources have been identified in this area. Because the proposed pipeline alignment would be located adjacent to existing ROW in this area, these facilities would not introduce a significant visual intrusion on the landscape.

The proposed marine tap interconnect and the remaining two proposed mainline valves would be constructed within the construction ROW for the proposed pipeline, and when in operation, would be inside the permanent ROW. The marine tap interconnect at MP 0.0 would be in open water, the mainline valve at MP 17.5 would be in upland forest, and the mainline valve at MP 22.7 would be in open space. The marine tap interconnect and the mainline valve at MP 17.5 have not been identified as designated scenic areas, and accordingly would not introduce a significant visual intrusion on the landscape. The mainline valve at MP 22.7 is located within the Peconic River Scenic Corridor, and along the William Floyd Parkway visual resource. However, the mainline valve is relatively small and, based on its proposed location, is not expected to present a significant change in the visual quality of the area surrounding the pipeline ROW.

Based on Iroquois' selection of aboveground facility sites in areas previously used for utility or industrial use or where they would be relatively visually unobtrusive, we believe that construction of the aboveground facilities would have minimal visual impact.